

RECORD OF FILE REVIEW

PLEASE COMPLETE THE FOLLOWING INFORMATION:	
Your name STEIN HAUKAAS	
Representing HERCULES OFFSHORE	
Address	
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Company name Couler Hexcules Offshore	
Permit number OR Compliance account no. RL-D/	18-11
Assisted by Sylvip (PGZ , Region 7	
Date 4/19/9/	

RECORD OF FILE REVIEW

PLEASE COMPLETE THE FOLLOWING INFORMATION:
Your name Mickey W. Tiner Representing HERCULES Off Store Drilling
Representing HERCULES OFF Store Deiller
Address LO DEAWER O
Fleefort, Tx 77541
Company name HERCULES Offshore Drilling
Permit number OR Compliance account nell
Line of the state
Assisted by Danny Didy . Broken ?
Date 6-5-99

RECORD OF FILE REVIEW

PLEASE COMPLETE THE FOLE	OWING INFORMATION:
Your name Mickey W.	JINFR.
Representing HERCULES	Off Store Deilling
Address 10 DlAWER	
Fleefort Tx	77541
Company name HERCULES	Offshore Drilling
	OR Compliance accoust not
Assisted by Danny	- Ody . Comment
Date 6-5-978	

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P.O. Drawer O Freeport, Texas 77541 Office: (409) 233-6371 Fax: (409) 233-6375

REGION 7 TEXAS AIR CONTROL 80/00

BLØ118V Must apply for permit!

December 11, 1991

Texas Air Control Board 5555 West Loop South Suite 300 Bellaire, Texas 77401-2192

SUBJECT:

Attention: Exemption Status Board

Ammendment to Permit # X13561

Dear Sir:

In January 1989 Hercules Offshore Corporation purchased property in Freeport, Texas from Fish Engineering. The property is located on the Intracoastal Waterway at mile marker 93. The geographical coordinates of the facility are 28° 58' 05" north latitude and 95° 17' 26" west longitude.

Hercules notified TACB in February 1989 of the change in ownership and the TACB transferred the permit exemption # X13561 to Hercules Offshore.

During the 1989 sales transaction, Hercules chose not to purchase one of the tracts of land owned by Fish Engineering. This tract of land contained settling ponds which Fish Engineering closed in 1982. Fish Engineering presently owns this tract.

Due to recent increase in business Hercules is requesting an amendment to the original permit # X13561. The increase will not affect our exemption status for emission. The emission of voc's will still be below 25T/yr.

An increase in cleaning barges has prompted Hercules request for an ammended status. In 1982 Fish Engineering cleaned a total of 150 barges. Hercules presently is cleaning about 240 barges annually. This increase is primarily due to the caustic barges which we clean. Caustic cleaning attributes to approximately one third (1/3) of our total. This increase also reflect projected increases in business. Emission data in enclosed report reflects our projected increase.

Texas Air Control Board Ammendment to Permit # X13561

December 11, 1991 Page 2

Hercules maintains its strict policy concerning wind direction in connection with our residential neighbors.

We at Hercules appreciate all your efforts to handle this matter expediously. If any problems or questions arise, please contact me at our facility (409) 233-6371.

Sincerely,

Darrell Guidry/Prøject Manager HERCULES OFFSHORE CORPORATION

DG/se

cc: T. Seward/Houston

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March 13, 1991

Mr. William W. Kwie, Ph.D. Permits Section Regional Operations Texas Air Control Board 5555 West Loop Suite 300 Beliaire, Texas 77401

Re: Standard Exemption Request for Hercules Offshore Corporation, Freeport, Texas.

Dear Dr. Kwie:

Pursuant to our discussions, Hercules Offshore Corporation (HOC) is requesting a standard exemption for their barge washing operation whereby the spent barge washwater is processed by a wastewater treatment system. Based on the Texas Air Control Board's (TACB) Standard Exemption List (dated August 11, 1989), HOC requests Exemption 61 (Page 13 of 68) be applicable for their situation. Exemption 61 states the "water and wastewater treatment units, provided all of the following conditions are met:

(a) The facility performs one or more of the following functions:

sedimentation biological treatment filtration aeration (for oxidation/biodegradation purposes only)

Please refer to the following figures for a depiction of the wastewater treatment system:

Figure 1 - Process Flow Diagram

Figure 2 - Barge Washwater Treatment System

Figure 3 - Biological Reaction System Schematic

The following should give the TACB a better insight of the HOC operations in Freeport:

HOC's main activities are the cleaning of barges and the repair of cargo-carrying barges. The repair of barges usually requires cleaning of the barges' tanks by washing and gas-freeing to enable work crews to cut and weld in safety. On the average, one to three barges are cleaned every day and this requires 2,000 to 6,000 gallons of water for proper cleaning.

Before washing can take place, any remaining heel of product is pumped out and stored in the Product Storage Tanks, or the Stripped Oil Settling Tank. The pumping (called stripping) is done by a portable air-operated pump which uses a flexible hose to reach into the barges' tanks sumps. One the average, a barge has 3 to 6 tanks with 50 gallons of heel in each tank sump. Periodically the Product Storage and Stripped Oil Settling Tanks are emptied into trucks and the contents sold for fuel or chemical use.

3-15-91 1600 Dr. William Kwie Page 2

Each tank in a barge is washed with a cleaning machine which projects a rotating spray of wash water throughout the tank. Cold high pressure water sprays are usually sufficient to clean tanks to enable repair work to begin.

Residual water in barges' tanks contains rust particles, scale and sludge which must be removed by vacuum. Vacuum pumps provide suction through a flexible hose to pump out the water remaining in the tanks and separate out the solids and sludge in settling tanks.

The used washwater and accumulated residue is stored in several storage tanks and are subsequently hauled off by a scavenger service to be disposed. The current expense to dispose of the spent washwater is extremely high.

Due to the very high expense of disposing the spent washwater, it was decided by Hercules to explore the possibilities of treatment and disposal into a POTW.

Since the barge to be cleaned may contain any number of chemical liquid compounds, the following is a listing provided by HOC of chemicals that they have handled in the past:

ACETONE
BENZENE
B.T.X.
BUTANOL
CUMENE
CYCLOHEXANE

DIESEL DICYCLOPENTADIENE

DIETHYLENE GLYCOL

ETHYL BENZENE 2-ETHYL HEXANOL

ETHANOL METHANOL NAPTHA TOLUENE PY-GAS XYLENE

PROPYLENE GYLCOL

STYRENE

VINYL ACETATE MONOMER

UNLEADED GASOLINE

CHLOROFORM

METHYLENE CHLORIDE PERCHLOROETHYLENE TRICHLORETHYLENE DAC OIL

CAUSTIC SODA AMMONIA NITRATE CALCIUM CHLORIDE MONOETHANOLAMINE

M.T.B.E. CRUDE OIL ANALON

ETHYL & METHYL ACRYLATE

ADIPONITROLE TETRAPROPYLENE

C-5 CRUDE ACETIC ACID DIETHANOLAMINE BUTYL ALCOHOL ETHYLENE GLYCOL

PIPERYLENE DRIPOLENE PIPERYLENE RESIN OIL

CARBON TETRACHLORIDE ETHYLENE DICHLORIDE PROPYLENE DICHLORIDE TRICHLOROETHANE

N.S. SOLVENT

An analysis was run in October and November, 1990 of a typical barge spent washwater. The tests were conducted by EFEH and Associates, Houston, Texas. This is the result of the chemical analysis:

I. TCLP INORGANICS (Leachate)

Arsenic, mg/l	< 0.01
Barium, mg/l	<0.05
Cadmium, mg/l	< 0.005
Chromium mg/l	< 0.01
Copper, mg/l	< 0.01
Lead, mg/l	< 0.01
Mercury, mg/l	< 0.002
Nickel, mg/l	< 0.01
Selenium, mg/l	< 0.01
Silver, mg/l	< 0.01
Zinc, mg/l	0.40

2. TCLP ORGANICS

Endrin	< 0.005
Lindane	< 0.01
Methoxychlor	< 0.01
Toxaphene	< 0.01
2,4-D	< 0.01
Silvex	< 0.01
Benzene	0.11
Carbon Tetrachloride	0.13
Chlordane	< 0.01
Chlorobenzene	< 0.01
Chloroform	0.02
o-Cresol	0.01
m-Cresol	< 0.01
p-Cresol	< 0.01
Cresol	< 0.01
1,4-Dichlorobenzene	< 0.01
1,2-Dichloroethane	< 0.01
1-1-Dichloroethylene	< 0.01
2,4-Dinitrotoluene	< 0.01
Heptachlor	< 0.004
Hexachlorobenzene	< 0.01
Hexachloro-1,3-butadiene	< 0.01
Hexachloroethane	< 0.01
Methyl Ethyl Ketone	0.24
Nitrobenzene	< 0.01
Pentachlorophenol	< 0.01
Pyridine	0.01
Tetrachloroethylene	< 0.01
Trichloroethylene	< 0.01
2,4,5-Trichlorophenol	< 0.01
2,4,6-Trichlorophenol	< 0.01
Vinyl Chloride	< 0.01

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Please keep in mind that the above results are of <u>untreated</u> barge washwater. The treatment system proposed will reduce the organics to non-detectable to trace amounts.

Hercules Offshore Corporation has gone to extraordinary lengths to mitigate the potential odor problems for their present barge washing operations. There is a Texas Electronics Inc wind speed and direction monitor (complete with strip chart recorder) for assessing when the wind currents are blowing in the Bridge Harbor subdivision. The Bridge Harbor subdivision is located on the other side of the inland water way to the northeast of HOC. At any given time, HOC can ascertain if the wind direction is blowing from the North to the East (with Northeasterly being the worst scenario). During this wind condition all barge operations are curtailed. The Texas Electronics instrument is the latest state-of-the-art device for this purpose. There is also a Taylor windscope as a backup. A windsock on a 20 foot high pole is prominently located to indicate to the barge workers what the wind direction is. Every effort has been made to insure that any potential odors do not affect the adjacent community. Being a "good neighbor" is very important to HOC.

We sincerely hope that the above information will be sufficient to obtain a favorable response to our exemption request.

If you have any additional comments or questions please contact me.

Very truly yours,

ESPEY, HUSTON & ASSOCIATES, INC.

M.A. Vivona, P.E.

Chief Process Engineer

Houston Division

MAV:sb

cc: Darrell L. Guidry - HOC R. Gery Montgomery - EH&A



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APR &: 1991

REGION 7 TEXAS AIR CONTROL BOARD

April 4, 1991

William W. Kwie, Ph.D. Permits Section Regional Operations Texas Air Control Board 5555 West Loop, Suite 300 Bellaire, Texas 77401

EH&A Job No. 13200-02

Dear Dr. Kwie:

Re: Standard Exemption Request for Hercules Offshore Corporation Freeport, Texas

Pursuant to discussions with Mr. Amba Mann, Control Strategy Division, Texas Air Control Board, Austin, Texas, it was indicated to me that the issuance for the exemption for the Hercules Offshore Corporation Barge Washwater facility will be the responsibility of the Houston division of the TACB. Since the facility is not located on land, the jurisdiction of the decision shall be with the local office. It is mainly a Corps of Engineers and Coast Guard concern rather than the TACB. The main issue here is the possible nuisance of the odor on the adjacent communities.

As I have indicated to you in my letter of March 13, Hercules Offshore Corporation (HOC) is taking every precaution to mitigate the potential odor problems for their present barge washing operations. <u>All</u> barge washing activities are curtailed when the wind currents blow in the direction of the Bridge Harbor subdivision. Sophisticated instrumentation is incorporated to ascertain the wind speed and direction. Charts are also maintained for historical purposes.

HOC sincerely hopes that you will give a favorable decision to their exemption request. Currently, HOC is going to apply for a TACB permit for a land-based emission control system (EMS). This EMS will serve as a back-up to the exemption and will enable HOC to perform barge washing operations under all conditions.

If you have any additional comments or questions, please contact me.

Very truly yours,

for M. A. Vivona, P.E.

Chief Process Engineer

David Patterson

Houston Division

MAV:SC

c: Darrell L. Guidry - HOC
J. L. Potts, P.E.
R. Gary Montgomery, P.E.
Reuben Velasquez, P.E.
David A. Patterson, P.E.

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